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Datasheet for 600-401-928

EGFR phospho Y1197 Antibody

Overview

Description:	Anti-EGFR pY1197 (RABBIT) Antibody - 600-401-928
Item No.:	600-401-928
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	EGFR is a transmembrane glycoprotein that is a member of a family of protein tyrosine kinases crucial in maintaining a normal balance in cell growth and development. Growth factor receptors are involved not only in promoting the proliferation of normal cells but also in the aberrant growth of many types of human tumors. For example, the epidermal growth factor receptor (EGFR) is mutated and/or overexpressed in many common solid human squamous cell carcinomas including breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. Over-expression of the EGFR gene occurs in carcinomas with and without gene amplification. EGFR and erbB-2 are particularly important in breast cancer because increased production or activation has been associated with poor prognosis. EGFR belongs to a family of growth factor receptors, which also includes ErbB-2/HER-2, ErbB-3/HER-3 and ErbB-4/HER-4. EGFR can heterodimerize with each of the members of this family.
Synonyms:	rabbit anti-EGFR pY1197 antibody, Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, ERBB, erbb 1, ERBB-1, HER1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	EGFR
Reactivity:	Human

PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to the C-Terminus near amino acids 1175-1200 of human EGFR protein.
Purity/Specificity:	This affinity-purified antibody is directed against the phosphorylated form of human EGFR protein at the pY1197 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against human EGFR pY1197 protein and the antibody is specific for the phosphorylated form of the protein. Reactivity with non-phosphorylated human EGFR is minimal by ELISA. A BLAST analysis was used to suggest cross reactivity with phosphorylated EGFR from human, mouse and rat sources. Reactivity of this antibody with EGFR from other species is unknown.
Relevant Links:	• UniProtKB - P00533 • NCBI - 29725609 • GeneID - 1956

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 170 kDa in size corresponding to phosphorylated EGFR protein by western blotting in the appropriate cell lysate or extract. Less than 5.0% reactivity is observed against the non-phosphorylated form of the immunizing peptide. This antibody is phospho specific for pY1197 of EGFR protein.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:20,000
IHC:	5 µg/ml
WB:	1:250 - 1:1,500

Formulation

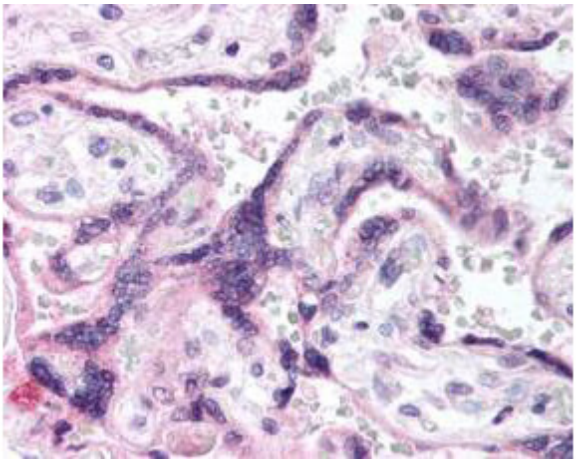
Physical State:	Liquid (sterile filtered)
Concentration:	0.55 mg/mL by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

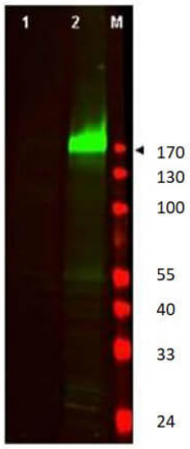
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
Immunohistochemistry of Rabbit anti-EGFR pY1197 antibody. Tissue: placental trophoblasts. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: EGFR pY1197 antibody at 5 µg/ml for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: EGFR pY1197 is on the cell membrane. Staining: EGFR pY1197 as precipitated red signal with hematoxylin purple counterstain.



Western Blot

Western Blot of Rabbit anti-EGFR pY1197 antibody. Lane 1: unstimulated A431 cells (p/n W09-000-361). Lane 2: A431 cells stimulated with EGF (50 ng/ml for 15 min) (p/n W09-000-362). Load: 30 µg per lane. Primary antibody: EGFR pY1197 antibody at 1:250 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C. Predicted/Observed size: 134.3 kDa, ~170 kDa for EGFR pY1197. Other band(s): none.

Disclaimer

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